

REMARKS

Claim Objections

The Office Action at page 2, paragraph 2, has objected to the disclosure because of the following informalities: claim 20, line 5, "all weights" is suggested to be changed to --all % weights-- and that appropriate correction is required.

Applicant has amended claim 20, line 5, to recite "all % weights".

Claim rejections under 35 U.S.C. 112, second paragraph

Claims 6 and 14-15 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action at page 3 indicates that claim 6, lines 2-3, and claims 14-15, line 2, include the recitation "Bright-Stock extract" that causes indefiniteness because the extract is defined by a Trade Mark, the content of which can be changed with time. Thus, the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

Applicant's specification at page 6, lines 6-13, discloses that lubricating oil extracts obtained by solvent extraction of a deasphalted oil are known in the art as Bright-Stock extracts, and may be obtained for example by solvent extraction of the deasphalted oil with phenol, N-methyl pyrrolidone, liquid sulphur dioxide, either alone or in combination with an aromatic compound, such as benzene, or furfural.

Applicant has amended claims 6, 14, and 15 by replacing "Bright-Stock extract" with language similar to the description disclosed in Applicant's specification at page 6, lines 6-13.

Claim rejections under 35 U.S.C. 102(b) as being anticipated by Fujitani

Claims 1-20 have been rejected under 35 U.S.C. 102(b) as being anticipated by Fujitani et al. ("Fujitani") (JP 01-242667). Applicant respectfully traverses the rejections. Reconsideration and withdrawal of the rejections are respectfully requested in view of the amendments and remarks.

Anticipation requires that a reference teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See MPEP §2131.

Applicant has submitted with the present Amendment an English translation of Fujitani that appears to describe the Fujitani examples more thoroughly than the English translation submitted by Applicant on October 20, 2004. For example, the translation submitted October 20, 2004 disclosed a Test 1 utilizing a Binder Resin of 1.5 pts. that appears to refer to pts. wt. In the translation submitted with the present Amendment, page 5 of the translation discloses Example 1 utilizing a Binder Resin of 15 parts that appears to signify parts by weight.

The third paragraph at page 3 of the English translation of Fujitani submitted by Applicant on October 20, 2004 indicates that it is ideal for the mixing ratio of the binder resin to be 10 - 20 wt.% of the total weight of the road marking material. When the binder resin content is less than 10 wt.% of the total, fluidity and binding strength of the road marking material tend to be poor. When the content is more than 20 wt.% of the total, stain resistance becomes poor although the fluidity and binding strength are satisfactory.

The third paragraph at page 4 of the English translation of Fujitani submitted with the present Amendment indicates that the amount of binder resin compounded is preferably from 10 to 20 wt% with respect to the whole of the road marking material. If the amount of binder resin compounded is less than 10 wt% then the fluidity and adhesion properties of the road marking material tend to be poor. Furthermore, if the amount compounded exceeds 20 wt% then the fluidity and the binding properties are good but the contamination resistance tends to decline.

Applicant respectfully suggests that Example 1 of Fujitani indicates a Binder Resin of 15 parts by weight.

Applicant's claim 1 is generally directed to a pigmentable binder composition. Thus, claim 1 is generally directed to a composition that is able to be pigmented and thus the components listed in claim 1 do not include a pigment. Furthermore, it is

related to a binder composition, rather than to an asphalt composition, and thus the components listed in claim 1 do not include an aggregate.

For example, Applicant's specification at pages 11-14, Examples 1-3, discloses three separate batches of "Mexphalte CP2" binder that were blended with, respectively, 1.0 % wt, 1.5 % wt, and 2.0 % wt of EBS (ethylene bis-stearamide), their properties being shown in Table 1. Applicant's specification at page 11, line 30 - page 12, line 1, indicates that "[s]ubsequently, synthetic mastic asphalt mixes were prepared by adding each of the pigmentable binder compositions described above to a respective batch of hot aggregate mixture. The amount of synthetic binder used in each synthetic asphalt mix ...". Applicant respectfully suggests that the pigmentable binder compositions exclude aggregate and are added to the aggregate to form synthetic asphalt mixtures.

Applicant respectfully suggests that the data in Fujitani that is relevant to Applicant's claim 1 and the claims depending therefrom is Fujitani Examples 1 and 2, excluding the content of colouring pigment (d) and inorganic filler (e). Applicant respectfully suggests that the reflecting material (f) of Fujitani Examples 1 and 2 should also be excluded because the Fujitani reflecting material is directed to the specific requirements of a road marking material.

As can be seen in Fujitani Example 1, the proportion of ethylene bislauric acid amide to the amide, binder resin, and plasticizer is $1.5/(1.5 + 15 + 3) = 7.7\%$ wt. In Fujitani Example 2, the proportion of ethylene bisstearic acid amide is $3/(3+15+3) = 14.3\%$ wt. Applicant respectfully suggests that the Fujitani quantities of amide are well above Applicant's range of from 0.05 to less than 3 % wt based on total composition of amide specified in Applicant's claim 1.

Further, Applicant respectfully suggests that Fujitani is concerned with a road marking material, that does not contribute to the structural strength of load bearing properties of the road itself, rather than to a synthetic asphalt. Therefore, Applicant respectfully suggests that Fujitani does not anticipate, disclose, or suggest a pigmentable binder composition suitable for use in synthetic asphalt.

Applicant also respectfully suggests that Fujitani is concerned with a different type of material than that of the present invention. Applicant respectfully suggests that a person skilled in the art concerned with pigmentable binder compositions would not

consider references concerned with road marking materials and would therefore have no reason to consider Fujitani. However, even if a person skilled in the art were to consider Fujitani, Applicant respectfully suggests that Fujitani does not suggest substantially reducing the proportion of acid amide in the binder composition to that specified in Applicant's claim 1.

Applicant respectfully suggests that Fujitani does not anticipate, disclose, or suggest Applicant's claimed invention.

**Claim rejections under 35 U.S.C 103(a) as being unpatentable over
Syrier in view of Janicki**

Claims 1-22 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Syrier et al. ("Syrier") (EP 0 179 510 B1) in view of Janicki ("Janicki") (CA 1 260 653). Applicant respectfully traverses the rejections. Reconsideration and withdrawal of the rejections are respectfully requested in view of the amendments and remarks.

The Office Action at page 5 indicates that the difference between the present claims and Syrier is the requirement of 0.05-less than 3 wt % of N,N'-alkylenebisstearamide to be used in the present invention.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). *See* MPEP §2142.

Syrier page 2, lines 3-4, discloses that the Syrier invention relates to a binder composition which is pigmentable comprising a mineral lubricating oil extract and a petroleum resin and/or coumarone-indene resin. Syrier page 2, lines 44-46, discloses that the ultimate asphaltic compositions in which the Syrier pigmentable binders may be used, usually contain mineral aggregates and fillers, each in proportions of e.g. 5-

98 %w, preferably 20-95 %w, based on the asphaltic compositions. Applicant respectfully suggests that Syrier is concerned with pigmentable binder compositions.

Janicki page 1, line 1, discloses that the Janicki invention pertains to modified asphalts. Janicki page 1, line 36 - page 2, line 3, discloses that the Janicki invention provides an asphalt blend which has an increased softening point over typically blown coating asphalts, while having an acceptably low viscosity at elevated processing temperatures.

Janicki page 2, lines 4-9, discloses that according to the Janicki invention there is provided a composition comprising a petroleum-derived asphalt and up to about 10 percent by weight of bis-stearoylamide. Also, in accordance with the Janicki invention, there are provided compositions, including roofing shingles, comprising the asphalt and bis-stearoylamide composition.

Janicki page 2, lines 25-27, discloses that the bis-stearoylamide can be mixed with the asphalt in any amount suitable to reduce the viscosity of the asphalt to that viscosity desired for the ultimate blend. The Janicki examples at pages 3-5 disclose roofing shingles for weather testing that were prepared by coating a conventional shingle base mat with asphalt coating compositions.

Applicant's specification, in the paragraph bridging pages 1 and 2, discloses that pigmentable binder compositions based upon non-bituminous constituents such as resins, lubricating oils, lubricating oil extracts and polymers have been developed. Pigmentable binders are defined as non-bituminous binders that may be coloured by the addition of pigments or coloured aggregate. Whilst the chemical composition of pigmentable binders is very different to bitumen, pigmentable binders have rheological properties similar to those of bituminous binders but have the advantage that they may be pigmented into a wide range of colours. Applicant's specification at page 3, line 31 - page 4, line 5 further discloses that the present invention provides a pigmentable binder composition for use in synthetic asphalt, which composition comprises a resin, a lubricating oil and/or a lubricating oil extract, and an amide additive.

In addition, Applicant's Examples 1-3 of Applicant's specification at pages 11-14 disclose several binder compositions comprising "Mexphalte CP2" and "EBS". As disclosed in Applicant's specification at page 11, lines 10-16, Mexphalte CP2 refers to

a commercial polymer-modified pigmentable binder comprising a modified petroleum resin, a Bright-Stock furfural extract, and polymeric components. As disclosed in Applicant's specification at page 11, lines 17-19, EBS refers to a commercial ethylene bis-stearamide.

Applicant respectfully suggests that there is no motivation to modify or combine the Syrier "pigmentable binder composition" with the Janicki "asphalt composition" to arrive at Applicant's claimed composition. Applicant respectfully suggests that Syrier and Janicki are related to two different types of compositions. Applicant respectfully suggests that the Office Action is using improper hindsight to combine the Syrier pigmentable binder composition that does not anticipate, disclose, or suggest an amide additive with the Janicki asphalt composition to arrive at Applicant's claimed composition. Applicant respectfully suggests that only with improper hindsight based on Applicant's disclosure would one skilled in the art with the Syrier disclosure of a pigmentable binder composition look for an amide additive in the Janicki disclosure of an asphalt composition.

Applicant also respectfully suggests that only with improper hindsight could Applicant's weight percent ranges be rendered obvious. Syrier discloses weight percents of components of Syrier's pigmentable binder composition that do not anticipate, disclose, or suggest an amide additive. Janicki discloses weight percents of components of Janicki's asphalt composition. Applicant respectfully suggests that only with improper hindsight based on Applicant's disclosure could one combine the two references related to different types of compositions to render obvious Applicant's amide additive and the weight percents of components of Applicant's pigmentable binder composition.

In addition, the objective evidence present in Applicant's specification indicates the nonobviousness of Applicant's claimed invention. For example, pages 13 and 14 of Applicant's specification disclose that from Table 1 it can be seen that the pigmentable binders according to the invention (Examples 1-3) have very similar penetration values to the untreated pigmentable binder (Comparative Example A). Further, it can be seen that the synthetic mastic asphalt compositions prepared from these binders have an improved workability; the temperature to which the synthetic mastic asphalt compositions according to the invention need to be heated being in the

order of 20 °C lower than those required to attain the same workability with the comparative compositions.

CONCLUSION

Applicant respectfully requests reconsideration and withdrawal of the objections to the claims. Applicant further respectfully requests reconsideration and withdrawal of the claim rejections under 35 U.S.C. 112, second paragraph, 35 U.S.C. 102(b), and 35 U.S.C. 103(a). Applicant further respectfully requests entry and consideration of the above amendments and remarks to advance the above-identified application to allowance.

Respectfully submitted,

EIVIND OLAV ANDERSEN



Attorney, Reece A. Scott
Registration No. 41,297
(713) 241-7256

P.O. Box 2463
Houston, Texas 77252-2463